

COMMENTS

The enclosed is responsive to Examiner's Office Action mailed on February 8, 2006. At the time Examiner mailed the Office Action claims 1-25 were pending. By way of the present response Applicant has: 1) canceled claim 11; 2) amended claims 1, 10, 18, and 23; and added claims 26 and 27. As such, claims 1-10 and 12-27 are now pending. Applicant respectfully requests reconsideration of the present application and the allowance of all claims.

35 USC 112 Rejections

Claims 1-9 and 18-25 were rejected under 35 USC 112, first paragraph as not enabling "comparing the predicted control word to a plurality of other control words." Support for this limitation may be found in at least paragraph 0041 ("total mismatch") and paragraph 0021 ("compares a set of stored values 180 against the predicted control word"). Furthermore, Applicants have amended claims 1 and 18.

Claims 1-25 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 was rejected on three bases. Claim 1 was first rejected because "it is not clear what is the utility of comparing the predicted control word to a

plurality of other control words.” As described earlier, Applicants have amended this claim thereby making this rejection moot.

Claim 1 was also rejected because “it is not clear where the plurality of other control words arise from.” Claim 26 describes where the control words arise from. However, Applicants do not believe that this limitation is necessary in claim 1.

Claim 1 was also rejected because “it is not clear what the result of comparing the actual control word to the plurality of other control words signifies, how it is used, and what is the relevance to re-execution.” Applicant respectfully traverses this rejection. The claim states “to cause re-execution of said plurality of operations if said actual control word matches any of the plurality of other control words” which is clear on its face. (Emphasis added.)

Claim 10 was rejected because “it is not clear where the plurality of other control words arise from” and “it is not clear what is the utility of the comparison result.” Applicants do not believe that the limitation of “where the other control words come from” is necessary in claim 10. Applicants have amended claim 10 and now include additional elements.

Claim 18 was rejected because “it is not clear where the plurality of other control words arise from” and “it is not clear what are the utilities of the comparison results and what are their relevance to their respective mechanisms.” Claim 27 describes where the control words arise from. However, Applicants do not believe that this limitation is necessary in claim 18.

Applicants have amended claim 18 to use either the first or second recovery the comparison results based on the comparison results.

Claim 23 was rejected because “it is not clear where the plurality of other control words arise from” and “it is not clear what the result of comparing the actual control word to the plurality of other control words signifies, how it is used, and what is the relevance to re-execution.” Applicants do not believe that the limitation of “where the other control words come from” is necessary in claim 23. Applicants have amended claim 23 to clarify how the results of the comparison are used.

Claims 2 and 12 were rejected because “the context of branch is not clear.” Applicants respectfully traverse this rejection. The claims require “re-execution” “substantially” according to a “branch misprediction process.”

35 USC 102 Rejections

Claims 10 and 13-15 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,770,103 (hereinafter “Alexander”).

As described in Applicants own background (paragraph 0005), Alexander describes “A processor using such control word renaming decodes a FLDCW instruction into a sequence of operations. In particular, when a FLDCW instruction is encountered, it is predicted that the control word will flip between two values, and instructions subsequent to the prediction may be colored or tagged differently so their speculative execution can be flushed in the event of a

misprediction. In such a processor, a test microoperation (uOP) is generated in response to the load floating point control word instruction to test this prediction. If a match occurs, then a serialization flow is needed."

With respect to claim 10, Alexander does not describe what Applicants claim 10 requires. Specifically, Alexander does not at least describe: testing whether an actual control word matches said predicted control word or one of a plurality of other control words; updating a prediction if the actual control word matches one of the plurality of other control words; or re-executing said plurality of operations if the predicted control word matches one of the plurality of other control words.

Accordingly, Applicants respectfully submit that Alexander does not describe what Applicants claim 10 requires. As claims 12-17 are dependent upon claim 10, they are allowable for at least the same reasons.

COMMENTS

If there are any additional charges, please charge them to our Deposit Account Number 02-2666. If a telephone conference would facilitate the prosecution of this application, Examiner is invited to contact Robert B. O'Rourke at (408) 720-8300.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 6/8, 2006


Thomas C. Webster (Reg. No. 46,154)

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8300